

Remarks on Substantive Examination

3. As a result of the Examiner's second restriction requirement, Claims 1-11, 27-32, and 34-39 are now pending in this application. Claims 1, 27, and 34 are independent claims.

4. The Examiner has rejected Claim 11 "under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Office Action mailed December 6, 2001, p. 3, paragraph 4. Applicants have amended this claim and respectfully request that the Examiner remove this ground for rejection.

5. Specifically, Claim 11 has been amended to correct a minor and obvious typographical mistake. This correction has not been made for a reason related to patentability. No new matter has been added.

6. The Examiner has rejected Claims 1-11, 27-32, and 34-39 under 35 U.S.C. § 103(a) as being unpatentable over Rutenberg et al. (U.S. Patent No. 4,269,995) ("*Rutenberg*"). Generally speaking, *Rutenberg* discloses a method for hydrating guar gum splits which involves the steps of hydrating the splits, extruding the splits, grinding the splits, and finally drying the splits to achieve the processed product. Col. 2, lines 12-16.

7. Applicants respectfully submit that the Examiner has failed to state a *prima facie* case of obviousness under § 103 in rejecting claims 1-11, 27-32, and 34-39. Section 2143 of the MPEP requires that the Examiner first cite prior art references that, alone or in combination, teach or suggest all of the claim elements. Furthermore, section 2143 of the MPEP requires the Examiner to demonstrate a motivation to combine the elements of the cited references with a reasonable expectation of success. Applicants submit that the Examiner has not met either of these burdens in rejecting the claims of this application.

Moreover, Applicants note that in paragraph six on pages four and five of the Office Action, the Examiner has alleged obviousness of all twenty-three pending claims without applying the disclosure of *Rutenberg* to a single one of them on an individualized basis. Pending claims 1-11, 27-32 and 34-39 have various limitations whose alleged teaching or suggestion by *Rutenberg* is not clear based upon the general statements of the Examiner in paragraph six of the Office Action. Applicants urge that as a minimum, each claim deserves sufficiently individualized analysis by the Examiner such that Applicants can see, for each claim or group

thereof, which aspects of the cited reference are alleged to teach or suggest corresponding claim language.

8. The reference relied upon by the Examiner, i.e. *Rutenberg*, does not teach or suggest every element of independent Claims 1, 27, and 34, contrary to section 2143 of the MPEP. Claim 1 recites a method including language as follows:

1. A method of manufacturing a powder having improved hydration characteristics, the method comprising the steps of:
 - (a) hydrating guar gum splits;
 - (b) processing the hydrated splits, said processing step including the substeps, in either order, of flaking the splits and extruding the splits;
 - (c) grinding said processed splits into a powder; and
 - (d) drying the powder.

9. With respect to the Examiner's rejection in paragraph six of the Office Action, close examination of the disclosure of *Rutenberg* demonstrates that this reference does not teach or suggest all of these claim elements.

Rutenberg teaches a method for preparing guar gum "by hydrating guar splits with sufficient water to provide a moisture content of about 25 to 80% by weight, preferably 50 to 60%, extruding the hydrating splits, and grinding them without prior drying. The resulting gums are generally dried." Col. 2, lines 13-16. *Rutenberg* teaches several variations on this method by changing the processing temperatures, etc.; however, the steps in the process remain the same.

Claim 1 recites the step of "processing the hydrated splits, said processing step including the substeps, in either order, of flaking the splits and extruding the splits." *Rutenberg* does not disclose or suggest the steps of extruding *and* flaking the splits to produce processed guar splits. Instead, *Rutenberg* suggests *replacing* the commonly used flaking step with the extruding step. Col. 5, line 66 - Col. 6, line 2. Nowhere in the disclosure of *Rutenberg* is such a combination taught or suggested.

Nor is there any teaching or suggestion in *Rutenberg* to modify *Rutenberg* to include both extruding and flaking steps. In fact, it appears that *Rutenberg* teaches away from the method of extruding and flaking recited in Applicants' Claim 1. *Rutenberg* teaches *substituting*

the flaking step with the extrusion step instead of *combining* the extrusion step with the overall manufacturing process. Col. 5, line 68 – Col. 6, line 2. This suggestion to *substitute* one processing step for another suggests to one of ordinary skill in the art that inclusion of both steps will not produce a desirable product. Consequently, not only does *Rutenberg* not teach all of the elements of the claimed invention, it teaches away from practicing the claimed invention; thus, a *prima facie* case for obviousness with respect to Claim 1 has not been made.

10. Claim 27 recites a method including language as follows:

27. A method of manufacturing a thickening agent for fluids, the method comprising the steps of:

- (a) hydrating plant seed endosperms that contain a polymer having fluid thickening properties;
- (b) processing the hydrated endosperms, said processing step including the substeps, in either order, of flaking the endosperms and extruding the endosperms;
- (c) grinding said processed endosperms into a powder; and
- (d) drying the powder.

Applicants respectfully submit that *Rutenberg* does not teach or suggest the foregoing method recited in Claim 27 for all the reasons set forth in regard to Claim 1 above. More specifically, *Rutenberg* does not teach or suggest all of the limitations of Claim 1 or Claim 27, nor is there a suggestion in the reference to combine or modify the steps articulated in *Rutenberg* with a reasonable expectation of success.

11. Claim 34 recites a method including the language as follows:

34. An improved method for manufacturing a fluid thickener in powder form wherein plant seed endosperms are hydrated, flaked, ground and dried, the endosperms containing a polymer having fluid thickening characteristics, the improvement comprising:

extruding the endosperms after hydrating but before grinding, said extruding performed either before or after the endosperms are flaked.

Applicants respectfully submit that *Rutenberg* does not teach or suggest the foregoing method recited in Claim 34 for all of the reasons set forth in regard to Claims 1 and 27 above. *Rutenberg* does not teach or suggest all of the limitations of Claims 1, 27, or 34, nor is there a suggestion in the reference to combine or modify the steps identified in *Rutenberg* with a reasonable expectation of success.

In summary, therefore, the Examiner is respectfully submitted to have failed to articulate a *prima facie* case of obviousness in respect of Claims 1, 27 and 34, contrary to section 2143 of the MPEP, in that the Examiner has not cited a reference that teaches or suggests each of the elements of Claims 1, 27 and 34. Furthermore, there is no suggestion to combine or modify *Rutenberg* with a reasonable expectation of success.

12. For the foregoing reasons, Applicants urge that independent claims 1, 27 and 34 are patentable over *Rutenberg*. Intervening dependent claims 2-11, 28-32, and 35-39 must *a fortiori* also be patentable, since they carry with them all of the limitations of the independent claims to which they ultimately refer. Applicants therefore request that the Examiner withdraw his rejections and allow claims 1-11, 27-32, and 34-39.

13. The Examiner has objected to Claim 2 "under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim." The Examiner states that "guar is a polygalactomannan, thus claim 2 fails to further limit claim 1." Office Action mailed December 6, 2001, p. 3, paragraph 2. In fact, guar is not a polygalactomannan; "guar is a legume-type plant that produces a pod," which is ultimately heated and split to expose the endosperm and the meal. Background of the Invention, p. 2, lines 3-6. Contained in the endosperm is a polysaccharide material referred to as polygalactomannan; thus, guar contains polygalactomannan, but Applicants submit that it is an incorrect statement to state that "guar is a polygalactomannan."

14. Furthermore, Applicants submit that Claim 2 is in proper dependent form in that it further defines an element of Claim 1. As discussed above, "guar gum splits" are made up of endosperm and meal. Thus, dependent Claim 2, which reads, "The method of claim 1, in which the guar gum splits comprise polygalactomannan," further limits the "guar gum splits" in Claim 1 by specifying which element of the "guar gum splits" are to be utilized. Consequently,

Applicants submit that Claim 2 is in proper dependent form and should be allowed without amendment.

15. Finally, Applicants respectfully submit that the Examiner used his personal knowledge in rejecting Claims 1-11, 27-32, and 34-39. Consequently, Applicants respectfully request that the Examiner provide a Rule 104(d) affidavit support his personal knowledge. With respect to Claim 2, the Examiner rejected the claim on the basis that "Guar is a polygalactomannan. . . ." With respect to the other pending claims, the Examiner states, "It would however be obvious to one of ordinary skill in the art to utilize both extruding and flaking of the guar, in the process of making ground guar, given the teaching of Rutenberg that extruding and flaking produce superior ground guar from guar splits, than guar not subject to extruding or flaking. . . . The utility of [extruder] barrels of differing size, in order to optimize the processing of the guar would be an obvious variation to one of ordinary skill in the art. The utility of chemically or genetically modified guar as an alternative to guar in the industrial uses disclosed by Rutenberg at column 1, lines 8-12 are well known, and would be obvious to one of ordinary skill in the art." Office Action mailed December 6, 2001, p. 4-5, paragraph 6 (citations omitted). Office Action mailed December 6, 2001, p. 3, paragraph 2.

16. These statements by the Examiner clearly reflect conclusions drawn on the basis of the Examiner's personal knowledge. Consequently, Applicants respectfully request that the Examiner provide a Rule 104(d) affidavit supporting this personal knowledge.

An Examiner may reject claims based on his or her own personal knowledge pursuant to the limitations set forth in Title 37, Section 1.104(d)(2) of the Code of Federal Regulations. 37 C.F.R. § 1.104(c)(3) (2001). Section 1.104(d)(2) states as follows:

When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

37 C.F.R. § 1.104(d)(2) (2001). Accordingly, should the Examiner maintain his rejection of Claims 1-11, 27-32, and 34-39 following consideration of this response to the Office Action,

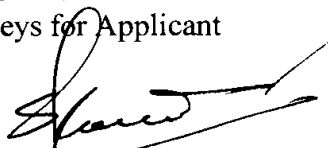
Applicants respectfully request that the Examiner enter into the record an affidavit supporting the Examiner's personal knowledge statements set forth above. Further, Applicants request that such affidavit set forth the Examiner's data as specifically as possible, in conformance with Rule 104(d)(2).

Conclusion

Applicants believe that this application meets all the requirements for allowance; Applicants respectfully request that allowance be granted. Should the Examiner have any questions or believe that a telephone interview may expedite the further examination of this application, the Examiner is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

VINSON & ELKINS L.L.P.
Attorneys for Applicant



Stuart J. Ford
Reg. No. 37,486
1001 Fannin, Suite 2300
Houston, Texas 77002
(713) 758-2708

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Version with markings to show changes made to amended claim 11:

11. (amended) The method of claim [2] 5, in which the powder is screened in said screening step through a 100 mesh sieve.